

ABSTRACT OF THE DISCLOSURE

A system and method for automatically and selectively modifying the source code of a computer program. A parser is provided for scanning the source code portion to recognize select syntax structures of the source code. A code modification portion is included in the parser which inserts instrumentation code at select locations of the source code based on the modification code. The instrumented source code can be compiled and executed using test loads to exercise different portions of the source code and obtain statistics such as frequency of global variable accesses, function calls, frequency of use of multiple code paths, etc.